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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/782,619	02/13/2001	M. James Grieve	DP-302899	9750
22851	7590	03/15/2006	EXAMINER	
DELPHI TECHNOLOGIES, INC.			BHAT, NINA NMN	
M/C 480-410-202			ART UNIT	
PO BOX 5052			PAPER NUMBER	
TROY, MI 48007			1764	

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/782,619

Applicant(s)

GRIEVE ET AL.

Examiner

N. Bhat

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 13 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 16, 2005 has been entered.

2. Applicant's arguments of September 15, 2005 have been fully and carefully considered. Applicant's arguments regarding the Botti et al. patents EP 1,047,144 and USP 6, 609,582 is persuasive both from the standpoint of anticipation and obviousness. Applicant is correct that Botti '144 or '582 does not teach introducing a first supply of fuel and first supply of air to a micro-reformer, to produce a heated reformat which is then directed to a main reformer to heat the main reformer and then increasing the first supply of fuel and the supply of air to the micro reformer to increase the amount of heated reformat directed to the main reformed as claimed in amended claim 1.

Accordingly the rejections made over Botti are withdrawn.

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

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F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-10 and 13-14 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims of U.S. Patent No. 6,562,496. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the instant invention and that of the '496 the a method starting a solid oxide fuel cell system which includes the steps of directing a first supply fuel and a first supply of air to a preheated micro-reformer; creating a heated pre-reformate in the micro-reformer and discharging a heated pre-reformate from the micro-reformer to a main reformer, preheating the main reformer with the preheated pre-reformate; introducing a second supply of fuel and as second supply of air to the main reformer, creating a heated main reformate in the main reformer, the only difference in the method is that applicant claims in the instant invention, increasing the first supply of fuel and the first supply of air to the micro-reformer to increase the amount of heated reformate directed to the main reformer. To control the first supply of fuel and first supply of air to increase the amount of heated reformate which is directed to the main reformer would have been obvious from the method as claimed by Faville because it would have been obvious to one having ordinary skill in the art that during start up to increase the amount of heated reformate by increasing the first fuel supply and air

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which is directed to the main reformer to heat up and provide fast start-up of the main reformer for producing hydrogen to the solid oxide fuel cell.

5. Claims 1-10 and 13-14 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 10-13 and 21-26 of U.S.

Patent No. 6,929,785. Although the conflicting claims are not identical, they are not patentably distinct from each other because both of the invention claim a method of using a preheated micro reformer system comprising introducing fuel and air to the micro reformer and vaporizing the fuel and producing an micro-reformer effluent which is then directed to a main reformer, however, the only difference between the instant invention and that of the '785 patent is that the '785 patent is broader in scope and does not teach the concept of increasing the first supply of fuel and the first supply of air to the micro-reformer to increase the amount of heated reformat directed to the main reformer. To control the first supply of fuel and first supply of air to increase the amount of heated reformat which is directed to the main reformer would have been obvious from the method as claimed by Faville because it would have been obvious to one having ordinary skill in the art that during start up to increase the amount of heated reformat by increasing the first fuel supply and air which is directed to the main reformer to heat up and provide fast start-up of the main reformer for producing hydrogen to the solid oxide fuel cell.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Keegan et al. teach a fuel cell system incorporating pressure control. Kirwan et al. teach a reformat/buffer system. EP 1 231 184 teaches a method


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and apparatus for preheating a fuel cell micro-reformer. Botti et al. teach a power generation system and method.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to N. Bhat whose telephone number is 571-272-1397. The examiner can normally be reached on Monday-Friday, 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


N. Bhat
Primary Examiner
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